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[Continued on next page]

(54) Title: ANTI-CD38 HUMAN ANTIBODIES AND USES THEREFOR

Variable Heavy Chain DNA

3077 VH1B (SEQ ID NO: 1):

(1) CAGGIGGAAT IGGITCAGAG CGGCGCGGAA GIGAAAAAC CGGGCGCGAG (51) COTGRAAGTG AGCTGCAAGG CCTCCGGATA TACCTTTACT TCTTACTCTA (101) TTAATTGGGT CCGCCAAGCC CCTGGGCAGG GTCTCGAGTG GATGGGCTAT (151) ATCGATCCGA ATCGTGGCRA TACGRATTAC GCGCRGRAGT TTCAGGGCCG (201) GGTRACCATA ACCORTANTA CCAGCATTAS CACCIGGRAT ATGRACCTOR (251) GCAGCCTGG TAGGRAGAT ACGGCGTGT ATTATRCCC GCGTRAGTAT (301) ATTATTTA TCATGGTA GCTTGATTT TGGGCCAAG GCACCTOGT

(351) GACGGTTAGC TCA

3079 VH3 (SEO ID NO: 2):

CAGGIGGAAY THOTOGAAAG COGCOGGGC CTOGTGCAAC COGGCOGCAG (51) CCTGCOTCTG AGCTGCGGGG CCTCCGGATT TACCTTTCT AAITATGGTA (101) TGCATTGGGT GCGCGAGCC CCTGGGAAGG GTCTGGATG GGTGAGCAAT (151) ATCOSTTCTG ATGGTAGCTG GACCENTIAT GCGGATAGCG TGAAAGGCCG (201) TITTACCATT TCACOTORTA ATTCGAAAAA CACCCTGTAT CTGCAAATGA (251) ACAGCCTGCG TGCGGAAGAT ACGGCCGTGT ATTATTGCGC GCGTCGTTAT (301) GGTGACGGTT AGCTCA TGTTACTGAT TATTGGGGCC AAGGCACCCT (381) GGTGACGGTT AGCTCA

3080 VH3 (SEQ ID NO: 3):

(1) CAGGIGGAAT IGGIGGAAAG COGCGGGGG CIGGIGGAAC CGGGCGGCAG (51) CCIGCCICIO ACCIGGGGG CCICCGGNIT TACCITICI TCTIATGGIA (S1) CURRENCES ACCUSANCES CEPCOSANT ENCORPTOR TOTALOGIA (101) TOCKTUSST GUSCANGOC CURSUANGS GICTOSAGUS GUIGAGCAN (151) AUCHITUTS AUGUSCAN TACCITITAT GUIGARAGACCA (201) TITUROCATT TUACHUSKIA AFTOGRARAA CACCUTSTAT CISCARAGA (251) ACAGCCTOG TUCQGARGAT ACGGCCOTGT ATTATTGCGC GOGTAATATG (301) TAXCGTTGGC CITTICATEA TITITITGAT TATTGGGGCC AAGGCACCCT

(351) GGTGACGGTT AGCTCA 3100 VH 3 (SEQ ID NO: 4):

(1) excepces as pageonas a concentrate entraparate figureagns (51) CCPGCGTCTG ASCYGCGCGG CCTCCGGNTT TACCTTTTCT TCTAATGGTA (101) TOTOTTOBOT GOGCCAAGCC COTGGGAAGG GTCTCGAGTG GGTGAGCAAT (151) ATCTCTANC TITCIAGCTC TACCTATIAT GCGGATAGCS TGARAGGCCG [201] TITLIACCHIT TCACHGATA ATTCGARADA CACCCIGIAT CHICADATGA (251) ACAGCCIGCO TOCOGRAGAT ACOGCCHIRI ATTRITICGC GCGTTTTAT (301) GCTTATTFTA ATTATECTES TOFFTEGGGC CARGCCCCC TGGTGACGGT

3077 1 VH1B (SEO ID NO: 31):

(351) TAGCTCA

CACGUCCART TROTCCAARG TOGTGCOGRA GTGAARARAC COGGCOCGAG (51) COTGAAAGIG AGCTGCAAAG CCTCCGGNIA TACCITYACT TCTTATTCIA (57) Abstract: The present invention provides recombinant antigen-binding regions and antibodies and functional fragments containing such antigen-binding regions that are specific for CD38, which plays an integral role in various disorders or conditions. These antibodies, accordingly, can be used to treat, for example, hematological malignancies such as multiple myeloma. Antibodies of the invention also can be used in the diagnostics field, as well as for investigating the role of CD38 in the progression of disorders associated with malignancies. The invention also provides nucleic acid sequences encoding the foregoing antibodies, vectors containing the same, pharmaceutical compositions and kits with instructions for use. The invention also provides isolated novel epitopes of CD38 and methods of use therefore.